

Attitudes Toward Transsexualism in a Swedish National Survey

Mikael Landén, M.D., Ph.D.,^{1,2} and Sune Innala, Ph.D.¹

A general inventory of the views on sex reassignment and attitudes toward transsexuals in Sweden was attempted. Whether the view on these matters differ between people embracing biological theories in explanation of transsexualism and those embracing psychological theories was tested. Third, whether men and the older age groups hold a different view on transsexualism than women and younger age groups was investigated. For these purposes, in October–December 1998, a questionnaire was mailed to a randomly selected national sample of 992 Swedish residents; 668 persons returned the questionnaire, giving a 67% response rate. Results showed that a majority supports the possibility for transsexuals to undergo sex reassignment; however, 63% thought that the individual should bear the expenses for it. In addition, a majority supported transsexuals' right to get married in their new sex and their right to work with children. Transsexuals' right to adopt and raise children was supported by 43%, whereas 41% were opposed. Results indicated that those who believed that transsexualism is caused by biological factors had a less restrictive view on transsexualism than people who held a psychological view. Men and the older age group were found to hold a more restrictive view on these issues than women and the younger age group. Future studies should address these questions to elucidate differences between cultures and the process of change in attitudes over time.

KEY WORDS: gender identity disorder; Sweden; attitudes; national sample; ethics.

INTRODUCTION

The treatment of choice for a selected group of transsexuals is sex reassignment (for a recent review, see Cohen-Kettenis and Gooren, 1999). This includes

¹Section of Psychiatry, Institute of Clinical Neuroscience, Göteborg University, Sweden.

²To whom correspondence should be addressed at Institute of Clinical Neuroscience, Section of Psychiatry, Sahlgrenska University Hospital/Mölndal, SE-431 80 Mölndal, Sweden; e-mail: mikael.landén@neuro.gu.se.

medical (hormonal) and surgical measures to change the physical appearance of the body, and legal measures to change the person's legal status of being a woman or a man. In Sweden, a law regulating sex reassignment came into force in 1972. Ever since, sex reassignment costs are covered by the public health care system and the sex-reassigned person receives the rights and duties of the new sex, including the right to get married and adopt and raise children. Yet, sex reassignment is a controversial issue and raises a number of ethical questions among many people (e.g., matrimonial issues, child custody issues, whether the treatment involved should be publicly funded). People's attitudes toward transsexuals and whether transsexuals encounter prejudices and discrimination in society are of importance for the transsexuals' quality of life.

Aims with this study were threefold. First, to make a general inventory of the ethical views on sex reassignment and attitudes towards transsexuals in Sweden. Second, to test our main hypothesis, derived from studies of attitudes about homosexuality (Ernulf *et al.*, 1989), that the view on transsexuals might differ between people depending on whether they embrace biological or psychological theories in explanation of transsexualism. Third, to test if the attitudes towards transsexuals differ between men and women, and between younger and older age groups. The present study is to our knowledge the first to address these questions in a national sample survey of lay people.

MATERIALS AND METHODS

Study Sample and Methods of Selection

The study group comprised individuals 18–70 years of age in Sweden. A sample of 992 persons was randomly selected from the national registration. Information about the person's civil status, age, sex, and income was also retrieved from the national registration.

Questionnaire

A questionnaire comprising 13 questions was distributed by mail together with a cover letter explaining the aim of the study. On the cover letter, transsexualism was briefly defined and the demarcation against transvestitism was explained. The wording of this definition in translation read as follows:

Transsexualism occurs in both men and women, and is characterized by a gender identity of the opposite sex. A transsexual person is often said to be trapped in the body of the wrong sex, and have a strong desire to live and be accepted as a member of the opposite sex and to "change sex." A sex change implies a new name, treatment with the hormones of the opposite sex, and surgery of the genitals to make his or her body as congruent as possible with the preferred sex.

Transsexualism is **not the same as transvestism**, which refer to men who occasionally dress in women's clothes. A transvestite does not wish to change sex.

It was emphasized that participation was voluntary and that the data were to be analyzed anonymously throughout the study. Telephone numbers to persons responsible for the project were specified. No pecuniary reward was offered to the participants.

Data Collection

The questionnaire was sent out on October 16, 1998. On October 29, a reminder was sent out by mail. Thereafter, two additional reminders were sent, along with a new questionnaire. The data collection closed on December 16, 1998. Two male respondents expressed their indignation of the form and chose not to answer the questions. One person was mentally retarded and the questionnaire was therefore returned unanswered.

Statistics

The Pearson's chi-square test was used for determining the significance of the relationship between categorical variables. The multiple comparisons made in this study imply a risk for Type I error, which can be adjusted for by, for example, the Bonferroni method. However, the Bonferroni method is too conservative for a large number of comparisons (Altman, 1991). We therefore chose a reasonably conservative correction in employing $p < .005$ instead of $p < .05$ as the level of significance for rejecting the null hypothesis.

RESULTS

A total of 668 questionnaires was returned, resulting in an overall response rate of 67%. Results concerning demographics are displayed in Table I. Significantly more women (72%) than men (63%) returned the questionnaire (chi-square, $df = 1$, $p < .01$). The other demographic characteristics of the respondents returning the questionnaires and the ones failing to do so were fairly evenly dispersed among the two groups. All respondents' answers to the questionnaire items are shown in Table II, in absolute numbers as well as in percentages.

Group comparisons between people who believed in a biological explanation of transsexualism versus people who believed in a psychological explanation were also conducted. The items "You are born that way" formed the *biological explanation group* ($n = 351$), whereas the items "You choose to be

Table I. Demographic Characteristics of People to Whom the Questionnaire Was Sent

Characteristic	People who returned the questionnaire				People who did not return the questionnaire			
	Males		Females		Males		Females	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Age (years)								
–19	9	2.8	14	4.0	5	2.7	4	2.9
20–29	55	17.4	55	15.6	27	14.4	25	18.4
30–39	68	21.5	76	21.6	44	23.4	20	14.7
40–49	68	21.5	79	22.4	39	20.7	30	22.1
50–59	61	19.3	58	16.5	42	22.3	34	25
60–69	51	16.1	63	17.9	30	16.0	21	15.4
70–79	4	1.3	7	2.0	1	0.5	2	1.5
Civil status								
Unmarried	118	37.3	112	31.8	84	44.7	40	29.4
Married	167	52.8	176	50	80	42.6	72	52.9
Divorced	26	8.2	50	14.2	22	11.7	20	14.7
Widow/widower	5	1.6	14	4.0	2	1.1	4	2.9
Income								
0	11	3.5	14	4.0	12	6.4	14	10.3
1–84,999	34	10.8	69	19.6	33	17.6	23	16.9
85,000–159,999	58	18.4	120	34.1	41	21.8	54	39.7
160,000–234,999	105	33.2	110	31.2	57	30.3	36	26.5
235,000–309,999	63	19.9	29	8.2	27	14.4	4	2.9
310,000+	45	14.2	10	2.8	18	9.6	5	3.7
Total	316	100.0	352	100.0	188	100.0	136	100.0

that way,” “You learn to be that way,” and “It is due to different experiences during childhood” formed the *psychological explanation group* ($n = 191$). The results, shown in Table III, indicate that those who believed that transsexualism is caused by biological factors had a less restrictive view on sex reassignment measures than people who held a psychological view. The biological group was also more prone to suggest publicly funded sex reassignment, to allow marriage in the new sex, and to allow transsexuals to adopt and work with children.

The comparison between men and women is also displayed in Table III. Men expressed a more restrictive view than did women on the sex reassignment measures. Moreover, men held a more restrictive view on sex-reassigned persons’ marriage and on the questions dealing with the respondents’ potential personal relations with a transsexual.

The median age in the study sample was 44 years. The older age group (>44 years, $n = 330$) was compared with the younger (≤ 44 years, $n = 338$). The results are shown in Table III. The older group was significantly more restrictive towards sex reassignment per se, whereas to a higher degree they reckoned that sex reassignment should be publicly funded than did the younger group. The two groups did not differ on the rest of the items.

Table II. Replies to a Questionnaire about Transsexualism, All Respondents ($n = 668$)

1. Do you consider transsexualism to be a disease that can be treated?	Yes	22% (148) ^a
	No	52% (345)
	Have no opinion/Have not thought about it	26% (175)
2. Are you of the opinion that transsexual person should have the opportunity to: change name	Yes	64% (427)
	No	14% (94)
	Have no opinion/Have not thought about it	22% (147)
	change identity	Yes 52% (349)
	No	22% (144)
	Have no opinion/Have not thought about it	26% (175)
	be treated with the sex hormones of the opposite sex	Yes 53% (357)
	No	19% (127)
	Have no opinion/Have not thought about it	27% (183)
	undergo surgical operation of the genitals	Yes 56% (377)
	No	18% (122)
	Have no opinion/Have not thought about it	25% (169)
3. Who should bear the expenses for a sex change?	Public funds	15% (100)
	The individual	63% (420)
	Have no opinion/Have not thought about it	21% (139)
4. Are you of the opinion that persons who have undergone a sex change should have the right to get married in their new sex?	Yes	56% (377)
	No	23% (154)
	Have no opinion/Have not thought about it	21% (137)
5a. Are you of the opinion that persons who have undergone a sex change and are single should have the right to adopt and raise children on equal terms with other single people?	Yes	29% (194)
	No	52% (346)
	Have no opinion/Have not thought about it	19% (128)
5b. Are you of the opinion that persons who have undergone a sex change and live together with a partner as a husband or wife should have the right to adopt and raise children on equal terms with other married people?	Yes	43% (287)
	No	41% (273)
	Have no opinion/Have not thought about it	16% (108)
6a. Are you of the opinion that a person who have undergone a sex change from female to male should be allowed to work with children, e.g., be a teacher or youth worker?	Yes	61% (410)
	No	20% (133)
	Have no opinion/Have not thought about it	19% (125)
6b. Are you of the opinion that a person who has undergone a sex change from male to female should be allowed to work with children, e.g., be a teacher, or youth worker?	Yes	61% (409)
	No	20% (135)
	Have no opinion/Have not thought about it	19% (124)
7. Would it be possible for you to have an openly transsexual person as a fellow worker?	Yes	71% (479)
	No	11% (73)
	Have no opinion/Have not thought about it	18% (116)

(Continued)

Table II. (Continued)

8. Would it be possible for you to have an openly transsexual person as a friend?	Yes	60% (402)
	No	18% (121)
	Have no opinion/Have not thought about it	22% (145)
9. Would it be possible for you to have an openly transsexual person as a partner?	Yes	2% (13)
	No	84% (563)
	Have no opinion/Have not thought about it	14% (92)
10. Are you of the opinion that society and the media pay too much attention to transsexualism?	Too much attention	17% (114)
	Just enough attention	30% (200)
	Too little attention	12% (81)
	Have no opinion/Have not thought about it	41% (272)
11. Do you know anyone who is transsexual?	Yes	8% (53)
	No	91% (609)
12. Do you think the incidence of transsexualism has increased in Sweden in the last 20 years?	Yes	38% (256)
	No	23% (151)
	Have no opinion/Have not thought about it	39% (261)
13. What do you think it is that makes a person transsexual? (Choose one alternative)	You choose to be that way	9% (60)
	You learn to be that way	1% (6)
	You are born that way	53% (351)
	It is due to different experiences during childhood	19% (125)
	It is a disease that may affect you	4% (27)
	Other	11% (73)

^a Absolute numbers are shown in parentheses.

DISCUSSION

We studied attitudes about transsexualism and transsexuals in a random national sample by means of mailing out a questionnaire to 992 Swedish citizens. The main finding was positive and tolerant attitudes toward transsexuals among lay people in Sweden. Subjects who believed that transsexualism is caused by biological factors held significantly less restrictive attitudes than subjects who believed in psychological explanations.

The transsexual person's right to undergo sex reassignment was supported by a majority of the respondents. In Sweden, a sex-reassigned person obtains all the rights and duties of the new sex, including the right to get married in the new sex and adopt and raise children. Whereas transsexuals' right to marry in their new sex was supported by 56% of the respondents, the right of transsexuals to adopt and raise children seems to be a more controversial issue that was accepted by 43% and opposed by 41% of the respondents. This can be compared with a study of 318 psychology students, in which 51% of the females and 39% of the males were in favor of transsexuals being allowed to adopt a child (Leitenberg *et al.*, 1983).

It is known, however, that employment discrimination against transsexuals occurs (see, for example, Green, 1992). However, more than 70% of the respondents could accept having an openly transsexual person as a fellow worker. Furthermore, an overwhelming majority did not think transsexualism should prevent a person from working with children. This is compared with the study by Leitenberg

Table III. Group Comparisons

		Psychological group, <i>n</i> = 191	Biological group, <i>n</i> = 351	Males, <i>n</i> = 316	Females, <i>n</i> = 352	Below median age, <i>n</i> = 338	Above median age, <i>n</i> = 330
1. Do you consider transsexualism to be a disease that can be treated?	Yes	24	15	33 ^d	12	20	24
	No	49	60	40 ^d	62	57	46
2. Are you of the opinion that a transsexual person should have the opportunity to: change name	Have no opinion/Have not thought about it	27	24	26 ^d	24	22	28
change identity	Yes	54 ^d	74	58	69	72 ^d	55
	No	20 ^d	9	17	11	14 ^d	15
	Have no opinion/Have not thought about it	23 ^d	14	22	17	13 ^d	25
be treated with the sex hormones of the opposite sex	Yes	42 ^d	63	45 ^a	59	54 ^c	50
	No	32 ^d	15	26 ^a	18	25 ^c	18
	Have no opinion/Have not thought about it	21 ^d	17	21 ^a	19	18 ^c	22
undergo surgical operation of the genitals	Yes	41 ^d	64	47 ^c	60	60 ^d	46
	No	31 ^d	10	25 ^c	14	21 ^d	17
	Have no opinion/Have not thought about it	23 ^d	19	20 ^c	22	16 ^d	26
3. Who should bear the expenses for a sex change?	Yes	43 ^d	68	50 ^b	62	64 ^d	49
	No	30 ^d	9	24 ^b	13	20 ^d	17
	Have no opinion/Have not thought about it	23 ^d	17	19 ^b	20	14 ^d	25
	Public funds	3 ^d	24	13	16	13 ^a	17
	The individual	78 ^d	56	67	59	70 ^c	55
	Have no opinion/Have not thought about it	19 ^d	18	17	23	15 ^a	25

(Continued)

Table III. (Continued)

		Psychological group, <i>n</i> = 191	Biological group, <i>n</i> = 351	Males, <i>n</i> = 316	Females, <i>n</i> = 352	Below median age, <i>n</i> = 338	Above median age, <i>n</i> = 330
4. Are you of the opinion that persons who have undergone a sex change should have the right to get married in their new sex?	Yes No	44 ^d 32 ^d 24 ^d	68 15 17	46 32 21	66 15 19	59 25 16	53 22 25
5a. Are you of the opinion that persons who have undergone a sex change and are single should have the right to adopt and raise children on equal terms with other single people?	Yes No	23 ^a 63 ^a 14 ^a	34 46 20	27 56 16	31 48 21	32 52 15	26 52 22
5b. Are you of the opinion that persons who have undergone a sex change and live with a partner as a husband or wife should have the right to adopt and raise children on equal terms with other married people?	Yes No	31 ^d 56 ^d 14 ^d	52 32 15	35 50 15	50 33 17	44 43 12	42 39 19
6a. Are you of the opinion that a person who has undergone a sex change from female to male should be allowed to work with children, e.g. be a teacher or youth worker?	Yes No	50 ^d 30 ^d 20 ^d	72 14 14	d? 56 ^a 26 ^a 18 ^a	66 15 18	63 20 16	60 19 20

6b. Are you of the opinion that a person who has undergone a sex change from male to female should be allowed to work with children, e.g., be a teacher, or youth worker?	Yes No	49 ^d 31 ^d 19 ^d	72 14 14	55 ^a 26 ^a 18 ^a	66 15 18	62 21 16	61 19 19
7. Would it be possible for you to have an openly transsexual person as a fellow worker?	Yes No	63 ^d 17 ^d 19 ^d	82 4 14	63 ^d 17 ^d 19 ^d	80 5 15	75 10 15	68 12 19
8. Would it be possible for you to have an openly transsexual person as a friend?	Yes No	48 ^d 27 ^d 25 ^d	71 10 19	52 ^d 27 ^d 20 ^d	68 11 22	63 18 18	58 18 24
9. Would it be possible for you to have an openly transsexual person as a partner?	Yes No	0.5 90 9	3 83 15	2 ^a 88 ^a 9 ^a	2 81 17	2 84 13	2 85 13
10. Are you of the opinion that society and the media pay too much attention to transsexualism?	Too much attention Just enough attention Too little attention	21 34 9	14 33 15	22 28 10	12 32 14	14 30 13	21 30 12
	Have no opinion/Have not thought about it	36	38	39	42	43	43

(Continued)

Table III. (Continued)

	Psychological group, n = 191	Biological group, n = 351	Males, n = 316	Females, n = 352	Below median age, n = 338	Above median age, n = 330
11. Do you know anyone who is transsexual?	Yes No	4 96	7 91	9 91	8 91	8 91
12. Do you think the incidence of transsexualism has increased in Sweden in the last 20 years?	Yes No	50 ^d 13 ^d	41 21	36 24	40 24	37 22
	Have no opinion/Have not thought about it	37 ^d	37	40	36	41
13. What do you think it is that makes a person transsexual? (Choose one alternative)	You choose to be that way You learn to be that way You are born that way It is due to different experiences during childhood It is a disease that may affect you Other	31 3 — 65 — —	8 ^c 1 ^c 45 ^c 25 6 9	10 1 59 13 3 10	10 1 49 22 3 10	8 1 56 16 5 9

All figures are percentages. The statistical significances shown in 1) the psychological group column refer to a comparison of the psychological group vs. the biological group; 2) the male group column refer to a comparison of the male group vs. the female group; 3) the below median age column refer to a comparison of the group below median age vs. the group above the median age.

^a $p < .005$.

^b $p < .001$.

^c $p < .0005$.

^d $p < .0001$.

and Slavin (1983) in which 65% of females and 37.5% of males thought that a transsexual individual should be allowed to work as a teacher. That this is not always the actual case, however, is illustrated by several cases in the United States, where male-to-female transsexual teachers have been dismissed because of an expected negative impact on children. The outcomes of the court rulings in these cases have been different (Green, 1992; Hucker, 1985).

Only 2% of the respondents thought that they could have a transsexual as a partner, which would implicate that the prospect of future marriage is poor. At odds with this, however, several outcome studies have found that half or more than half of the patients establish lasting relationships after sex reassignment (Eicher, 1992; Eldh *et al.*, 1997; Pfäfflin *et al.*, 1990; Wälinder *et al.*, 1975).

The group who believed that transsexualism is caused by biological factors represented more than 50% of the sample. The basis for the notion that beliefs concerning the origin of atypical sexual behavior may influence attitudes is a study of attitudes toward homosexuals (Ernulf *et al.*, 1989). The authors found that subjects who believed that homosexuals are “born that way” held significantly more positive attitudes toward homosexuals than subjects who believed that homosexuals “choose to be that way” and/or “learn to be that way.” In the present study, the groups differed similarly concerning attitudes toward transsexuals. Taken together, these findings support the notion that a biological view on atypical sexual behavior is linked to a more tolerant attitude toward the people with these sexual variants.

Of the respondents, 8% answered that they knew a transsexual. Given that there—at the time of the survey—were approximately 400 known transsexuals (Landén *et al.*, 1996a) and 8,860,000 inhabitants in Sweden (Official Statistics of Sweden, 1998), each transsexual would be known to approximately 1,772 people. This high figure could mean that the respondents interpret the question as if they have heard of any transsexual in their vicinity. In a small city for instance, a transsexual is so unusual that most people have heard of him/her. The figure may also—although it is less likely—reflect a hidden population of transsexualism (i.e., that the prevalence of transsexualism is higher than is reflected in the official figures).

The question whether the incidence of transsexualism has increased since the early 1980s yielded a result that is not in accordance with current knowledge. Transsexualism is a rare phenomenon in Sweden. The annual incidence of sex reassignment in Sweden being in the interval of 0.14–0.17/100,000 inhabitants over 15 years of age (Landén *et al.*, 1996a). This estimate has remained stable since the early 1970s (Landén *et al.*, 1996b). Only 23% of the respondents suggested no increase of the incidence. The answers probably reflect the increased visibility of this hidden population over the years.

Men held more restrictive views toward transsexualism and transsexuals than did women. This is in accordance with the results of Leitenberg and Slavin (1983).

Few previous studies addressed the question of attitudes toward transsexualism and transsexuals. Although it is commonly believed that society has adopted

more tolerant and reconciled attitudes toward people with an atypical sexual identity, the literature on this subject is scarce. Green and coworkers studied attitudes toward sex reassignment among medical professionals and sexual minorities in 1966. Although that study, due to methodologic differences, is difficult to compare with the current survey, the responses as well as the questionnaire used by Green *et al.* reflect a more restrictive view on sex reassignment than we faced. Researchers that have investigated health-care professionals over time have found striking changes toward more liberal views (Franzini *et al.*, 1986). In the present study, the younger group was more positive to sex reassignment than the older group, which may reflect a change in attitudes over time. However, transsexuals are still met with suspicion and hostility by some people (Rehman *et al.*, 1999), but probably to a lesser degree than before.

Attitudes toward people with an atypical sexual identity differ between cultures. In Burma, for example, transsexuals are sometimes respected in roles as shamans and seers (Coleman *et al.*, 1992), whereas the condition in Western societies warrants a medical diagnosis (American Psychiatric Association, 1994; World Health Organization, 1993). The current public financing of sex reassignment in Sweden is a result of the medical establishment's view of transsexualism as a disease. In contrast, however, a majority of respondents in our survey did not regard transsexualism as a disease. This may be one reason why they did not agree with the current manner of public funding and thought that the individual him-/herself should bear the expenses for sex reassignment. In addition, many people may regard sex reassignment as a cosmetic treatment, and the results may thus reflect the current debate regarding whether such treatment should be funded publicly.

Legislation influences moral values in a society and contributes to more positive attitudes (Monteith, 1993). Thus, the relatively positive view on transsexualism and transsexuals reflected in this study might partly be explained by the legislation in Sweden. Since 1972, the sex-reassigned person is granted the rights and obligations of the new sex (Wälinder *et al.*, 1976). Several other countries have since followed and legislated on this issue (Petersen *et al.*, 1995; Weitze *et al.*, 1996). There is, however, reason to believe that the significant import of these laws is unknown to the majority of the population.

Like all questionnaire surveys, we faced the problem of nonrespondents. However, in this study the overall response rate was 67%, which is higher than in previous studies of sexual behavior in Britain and some other countries (Kupek, 1998). A recent interview study of sexual behavior in Sweden 1996 had a response rate of 59% (Lewin, 1996). Although somewhat more women than men returned the questionnaire, the remaining demographic characteristics of the respondents and the dropouts were similar (Table I). The results can thus be expected to be reasonably representative for the population as a whole. It is possible, however, that people who do not want to discuss atypical behavior in any context are overrepresented in the nonrespondent group. In that case, the survey has probably yielded a less restrictive view than is the actual case.

In conclusion, this study found positive and tolerant attitudes toward transsexuals among lay people in Sweden. Subjects who believed that transsexualism is caused by biological factors, women, and the younger age group held significantly less restrictive attitudes than subjects who believed in psychological explanations, men, and the older age group. Future studies should address these questions to elucidate differences in attitudes between cultures and the process of change over time.

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